

APPENDIX B

Units of Measure

This appendix lists the units of measure and their abbreviations commonly used in meteorology. It also contains factors for converting from one unit of measure to another.

Temperature	Unit of Measure	Abbreviation	Conversion Formulas
	Degrees Fahrenheit Degrees Celsius (Formerly referred to as degrees centigrade)	°F °C	$9/5 (°C) + 32 = 1.8 (°C) + 32$ $5/9 (°F - 32) = .556 (°F - 32)$

Length	Metric	Abbreviation	US Equivalent
	kilometer meter centimeter millimeter statute mile nautical mile yard foot inch	km m cm mm mi naut mi yd ft in	1,000 m = .62 mi 1,000 mm = 100 cm = 39.37 in 10 mm = .39 in .001 m = .04 in 5,280 ft 1.15 mi = 1,852 m .9144 m 30.48 cm 2.54 cm

Velocity	Unit of Measure	Abbreviation	Conversions
	kilometers per hour meters per second nautical miles per hour statute miles per hour, or miles per hour feet per second	kmph m/sec knots mph ft/sec	1 knot = 1.84 kmph = 1.15 mph = .514 m/sec 1 mph = .447 m/sec = .87 knot

Pressure	Unit of Measure	Abbreviation
	atmosphere pounds per square inch millibars inches of mercury centimeters of mercury kilopascal grams kilograms milligram-minutes per cubic meter	atm psi mb in Hg cm Hg kP gm kg mg-min/m ³